

fiscal year 2007 at the current \$0.85 interim surcharge level⁵ (SETB Cost Projection, Transmittal Letter at 1). In light of SETB's projections of under-funding, on April 5, 2006, the Department opened this investigation to establish a revised surcharge to recover, through December 31, 2007,⁶ prudently incurred expenses to provide wireline E911 service and disability access programs, and for recovery of the deficit accumulated under the directory assistance funding mechanism through December 31, 2007.

On May 3, 2006, a public hearing and procedural conference was held at the Department's offices. The Attorney General of the Commonwealth intervened as of right pursuant to G.L. c. 12, § 11E. Verizon New England, Inc. d/b/a Verizon Massachusetts ("Verizon") and AT&T, Inc. were granted intervenor status.

An evidentiary hearing was held on August 7, 2006 at the Department's offices. At the evidentiary hearing, SETB sponsored the testimony of Paul J. Fahey, Executive Director of SETB. John L. Conroy, Vice President of Regulatory Massachusetts for Verizon, also testified at the hearing on behalf of Verizon. The evidentiary record consists of five SETB

⁵ The interim E911 surcharge level of \$0.85 per month was established in Investigation by the Department of Telecommunications and Energy to establish a surcharge to recover prudently incurred costs associated with the provision of wireline Enhanced 911 services, relay services for TDD/TTY users, communications equipment distribution for people with disabilities, and amplified handsets at pay telephones, D.T.E. 03-63 - Phase I, at 18 (2003) ("E911 Interim Surcharge Order").

⁶ Statutory authority for recovery of expenses for the provision of wireline E911 services, for disability access programs and for deficit recovery through the surcharge funding mechanism expires on December 31, 2007. See G.L. c. 6A, § 18½.

exhibits and two Department exhibits. In addition, the record includes SETB and Verizon responses to Department discovery, and SETB and Verizon responses to 20 record requests.

II. SETB REQUEST REGARDING CONFIDENTIAL DOCUMENTS

On July 6, 2006, SETB moved for confidential treatment of information contained in Exhibit 1 of SETB's response to discovery request DTE-SETB 1-14(a) ("Exhibit 1") and Appendix F of SETB's response to discovery request DTE-SETB 1-14(c) ("Appendix F"). SETB's response to discovery request DTE-SETB 1-14(a) consists of the relay services and disability access programs contract between SETB and Verizon⁷ and Exhibit 1 of that contract contains the applicable rates set forth in the contract. SETB's response to discovery request DTE-SETB 1-14(c) consists of the Wireline E911 contract between SETB and Verizon and Appendix F of that contract lists the precise locations of each Public Safety Answering Point ("PSAP") in the Commonwealth.⁸ Redacted versions of Exhibit 1 and Appendix F were filed in the public docket.

In support of its request for confidential treatment, SETB argues that the summary of applicable rates set forth in Exhibit 1 were confidential and proprietary to Verizon, and that public release of this competitively sensitive information could have an adverse affect of

⁷ Verizon is the administrator of the disability access programs. Because these programs are funded by the E911 Wireline Fund, which SETB administers, SETB contracts with Verizon for the provision of these services. SETB disperses funds to Verizon for Verizon to pay for the disability access programs including relay services for the hearing impaired which are currently provided by Sprint Communications Company.

⁸ There are over 270 PSAPs located in the Commonwealth (see Exh. DTE-SETB 1-14(c)).

Verizon's financial interests (SETB Motion for Confidential Treatment at 2). Regarding Appendix F, SETB argued that for public safety reasons, SETB treats the exact addresses of each PSAP in the Commonwealth as proprietary information and maintained that public release of the PSAP address list could jeopardize public safety (id.).

At the commencement of the evidentiary hearing, the Department determined that Exhibit 1 and Appendix F contained confidential, competitively sensitive or proprietary information and granted protective treatment to Exhibit 1 and Appendix F⁹ (Tr. at 4). But, in lieu of establishing a sunset provision for confidentiality of these documents, SETB requested that the Department return Exhibit 1 and Appendix F to SETB after the appeal process in this proceeding had run (see Tr. at 4-5).

The Department has considered SETB's request and determines that granting SETB's request for the return of Exhibit 1 and Appendix F after the appeal process has run would be inappropriate. While the documents at issue are deemed confidential and protected from public disclosure, they have been admitted into evidence and must be maintained as part of the adjudicatory record. We find that granting SETB's request would be inconsistent with our obligation to maintain a complete and accurate adjudicatory record. Massachusetts requirements mandate the retention of the adjudicatory record by the Department in proceedings before us. See Massachusetts Statewide Records Retention Schedule 06-06 (May 3, 2006). We note that the Massachusetts Statewide Records Retention Schedule

⁹ SETB's response to discovery request DTE-SETB 1-14, which includes subparts (a) through (d), was marked and admitted into evidence as Exh. DTE-SETB 1-14.

mandates that the Department retain the adjudicatory record permanently. Id. We determine that SETB's request for the return of Exhibit 1 and Appendix F, which have been admitted into evidence in this proceeding, is a drastic departure from the Department's long-standing practice for protecting confidential information. Accordingly, we deny SETB's request.

We now address the appropriate time period for confidentiality of Exhibit 1 and Appendix F. As a general rule, information becomes stale with the passage of time and, therefore, the risk of harm from disclosure of confidential information on an appropriate sunset date should be minimal. Regarding Exhibit 1, the contract expires June 30, 2007 and we find that the competitive harm of disclosure of rate information contained in an expired contract is minimal. Accordingly, the Department finds it appropriate to establish the sunset date to coincide with the June 30, 2007 expiration date of the relay service and disability access programs contract. Prior to that date, SETB may renew its request for confidential treatment, accompanied by proof of the need for such protection.

Regarding Appendix F, which contains the precise addresses of all PSAPs in the Commonwealth, SETB seeks to recover costs associated with PSAP moves¹⁰ (see RR-DTE-2). A review of the evidence regarding PSAP moves shows that the number of PSAP moves, and the expense associated with these moves, is projected to increase significantly in the coming

¹⁰ PSAP moves are necessary when new facilities are built or when a PSAP needs to be relocated within an existing facility. The decision to move a PSAP to a new facility or within an existing building is made by the municipality and based upon local considerations, e.g., call-flow (Exh. DTE-SETB 1-13(d); Tr. at 34-36).

years.¹¹ Therefore, as more PSAPs relocate in the future, the PSAP address information in Appendix F will become less accurate. Nevertheless, given our nation's heightened security concerns, we determine that public disclosure of Appendix F, even if some of the exact PSAP addresses change over time, would still be unwise. Therefore, we decline to impose any sunset date for confidentiality of Appendix F and grant nondisclosure status to this document under G.L. c. 4, § 7 cl.26(n).

III. E911 REVISED SURCHARGE¹²

A. Standard of Review

Massachusetts law provides for the funding of "prudently incurred" expenses associated with the provision of wireline E911 service and disability access programs by means of a surcharge on each voice grade exchange telephone line of business and residence customers within the Commonwealth. G.L. c. 6A, § 18H½; see also Acts of 2002, c. 291, § 1. In addition, Department regulations require that the surcharge must be sufficient to recover not only prudently incurred costs associated with the provision of E911 service and disability access programs, but also prudent capital improvements to be made to the wireline E911

System. See 220 CMR § 16.03(4). Department regulations also allow for recovery of a

¹¹ Indeed, SETB projects \$180,000 in expenses for PSAP moves in FY 2007 as compared to actual expenses of \$2,108 in FY 2006 (RR-DTE-2 Supp., Revised Scenario 2).

¹² The E911 surcharge to be established as a result of this proceeding has been referred to as a "permanent" surcharge and also as a "revised" surcharge. However, because the Legislature has authorized the surcharge mechanism to fund E911 services, disability access programs and deficit recovery only through December 31, 2007, see G.L. c. 6A, § 18½, we will refer to the surcharge we establish herein as a "revised" surcharge.

portion of the deficit associated with the provision of E911 and disability access programs under the prior directory assistance funding mechanism. Id.

Even though Massachusetts law gives the Department the authority to implement a surcharge to recover prudently-incurred expenses for provisioning wireline E911, SETB is charged with coordinating and effecting the implementation of E911 service and administering such services in the Commonwealth. See G.L. 6A, § 18B(b). In fact, the Department has held that SETB has sole statutory authority to determine the types of equipment, training and support for which expenditures are necessary. See E911 Interim Surcharge Order at 15; see also Order Adopting Final Regulations¹³ at 6-7.

B. SETB Proposals

1. Background

On January 9, 2006, SETB proposed an increased surcharge of \$1.11 for effect beginning July 1, 2006¹⁴ (Exh. SETB-4). On May 26, 2006, SETB provided updated cost and

¹³ Rulemaking by the Department of Telecommunications and Energy, pursuant to 220 C.M.R. §§ 2.00 et seq., to promulgate regulations to establish a funding mechanism for wireline Enhanced 911 services, relay services for TDD/TTY users, communications equipment distribution for people with disabilities, and amplified handsets at payphones, as 220 C.M.R. §§ 16.00 et seq., D.T.E. 03-24-A (2003) ("Order Adopting Final Regulations").

¹⁴ Because E911 revenues are determined, in large part, by multiplying the number of wireline customers by the surcharge, SETB states that the primary reason for the requested increase in the surcharge is based upon the over-projection in the number of wireline customers used to calculate the \$0.85 surcharge (SETB Brief at 7). SETB states that the projection of 5.1 million wireline customers to determine the \$0.85 surcharge over-projected the actual number of wireline customers in FY 2004 through FY 2006 by approximately 25 percent (id., citing RR-DTE-2; Exh. SETB-3, at 4; Exh. SETB-4; Exh. DTE-2; Tr. at 102-103; see also RR-DTE-2 Supp.).

revenue projections and proposed two surcharge options (see Exh. SETB-1). The first option was a proposed surcharge of \$1.56 for effect January 1, 2007 through June 31, 2007 while the second option was a surcharge rate of \$1.22 for effect January 1, 2007 through December 31, 2007 (id.). On June 21, 2006, SETB made additional revisions to its cost projections which increased the surcharge proposals to \$1.64 and \$1.30, respectively (Exh. SETB-2).

After the evidentiary hearing, SETB presented the Department with two updated surcharge proposals that superseded the prior proposals (see RR-DTE-2, Scenarios 1 and 2).¹⁵ Specifically, Scenario 1 of RR-DTE-2 proposed a \$1.52 monthly surcharge with a computer equipment upgrade completion date of June 2007 while Scenario 2 of RR-DTE-2 proposed a \$1.02 surcharge with a December 2007 completion date for the computer equipment upgrade (id.). On November 20, 2006, SETB submitted a supplemental response to RR-DTE-2 which included a revised surcharge proposal of \$0.99 under Scenario 2 (see RR-DTE-2 Supp, Revised Scenario 2.).¹⁶ SETB indicates that the revised surcharge proposal of \$0.99 was necessary to reflect the reduction of the projected equipment upgrade costs as a result of the

¹⁵ The post-hearing proposals were requested by the Department to include additional interest income and revised revenue projections based upon the effective date of the proposed surcharge (see RR-DTE-2, Tr. at 21, 70, 74).

¹⁶ We conclude that SETB's supplemental response to RR-DTE-2 was properly submitted pursuant to Department regulations. Specifically, Department regulations state that "a party is under a continuing duty to amend seasonably an early response if it obtains information that the response was incorrect or incomplete when made, or that the response, though correct when made, is no longer true or correct." See 220 C.M.R. § 1.06(6)(c)(5). Moreover, given that SETB's revised surcharge proposal in RR-DTE-2 Supp. is lower than SETB's previous proposal, it is in the public interest to consider it. Accordingly, the Department incorporates SETB's supplemental response to RR-DTE-2 into the record.

renegotiated rates in the E911 Wireline Contract (RR-DTE-2 Supp.). Accordingly, the two SETB proposals that the Department will consider in this proceeding are Scenario 1 in RR-DTE-2, consisting of a proposed \$1.52 monthly surcharge, and Revised Scenario 2 in RR-DTE-2 Supp., consisting of a proposed \$0.99 monthly surcharge.

2. Current Proposals

Regarding the two proposals presented for the Department's consideration, SETB prefers the proposed surcharge in Revised Scenario 2, stating that the June 2007 completion date in Scenario 1 is "highly unlikely to occur" (see RR-DTE-2; RR-DTE-2 Supp.; RR-DTE-8; SETB Brief at 6). SETB further states that the proposed \$1.52 surcharge in Scenario 1 generates a fund balance of over \$21 million by December 31, 2007, which could then be reduced by lowering the surcharge for the July 1, 2007 through December 31, 2007 period, but, SETB states, such action would likely have rate continuity implications and create customer confusion (RR-DTE-2; SETB Brief at 6). Furthermore, Verizon prefers Scenario 2 over Scenario 1 because, according to Verizon, Scenario 2 appears to result in a more prudent surcharge rate more in line with the current surcharge (Verizon Brief at 2).

As an initial matter, we limit our review in this Order to an evaluation of Revised Scenario 2, and hereby reject Scenario 1 at the outset for the following reasons. First, Scenario 1 is based upon a unrealistic completion date for the computer upgrade, which SETB acknowledges, as noted above. Second, we find that the level of the surcharge should meet the projected expenditures as closely as possible. Scenario 1, however, proposes to increase the current surcharge level by 88 percent resulting in a \$21 million fund balance by December 31,

2007. We cannot justify this over-collection of surcharge revenues, particularly given the more reasonable option presented in Revised Scenario 2. Nor do we find that reducing the proposed \$1.52 surcharge level after six months, and for only a six month period, an acceptable solution to over-collection. Indeed, SETB itself does not advocate such action (SETB Brief at 6). As Verizon notes, frequent changes to line items in bills and multiple customer notifications of upcoming changes lead to customer confusion and dissatisfaction (see Verizon Brief at 2). Accordingly, we limit our review to the \$0.99 surcharge proposed in Revised Scenario 2 of RR-DTE-2 Supp.

C. Positions of the Parties

1. SETB

SETB argues that it has demonstrated that the inputs and the revenues and expenses contained in Scenario 2 of RR-DTE-2 are reasonable and necessary (SETB Brief at 6). In Revised Scenario 2, SETB proposes a revised E911 surcharge of \$0.99 per month, for effect beginning January 1, 2007 (RR-DTE-2 Supp). The proposed \$0.99 surcharge is based upon actual and estimated program costs, deficit recovery costs, and access line counts (i.e., number of wireline customers) (see RR-DTE-2, RR-DTE-2 Supp.). Specifically, the proposed surcharge is based upon three fiscal years¹⁷ ("FY") of actual revenues and expenses, FY 2004 through FY 2006, and 18-months of estimated figures, FY 2007 and the first six months of FY 2008 ("partial FY 2008") (SETB Brief at 4). The proposed \$0.99 surcharge will recover

¹⁷ SETB's fiscal year runs from July 1 through June 30 of the following year.

expenses incurred between September 1, 2003¹⁸ and December 31, 2007 (RR-DTE-2; RR-DTE-2 Supp., Revised Scenario 2). Additionally, the proposed \$0.99 surcharge provides a reserve of \$2.13 million by December 31, 2007¹⁹ to pay for maintenance and operational costs beyond December 31, 2007 and to cover any contingencies (RR-DTE-2; RR-DTE-2 Supp., Revised Scenario 2).

a. Revenue

SETB's revenue projections contained in the proposed \$0.99 surcharge include the actual revenues generated by the current \$0.85 interim surcharge for FY 2004 through FY 2006 and the projected revenues from the proposed \$0.99 revised surcharge for FY 2007 and partial FY 2008 (RR-DTE-2; RR-DTE-2 Supp., Revised Scenario 2). The projected total revenue figure for each fiscal year was calculated based upon the beginning fund balance, net revenue derived by multiplying the surcharge by the number of customers (e.g., line count) and subtracting a one percent administrative fee and a two percent uncollectible revenue amount, on a monthly basis, and adding actual or estimated interest earned on the monthly

The \$0.85 surcharge took effect on September 1, 2003 and was based upon estimated data. See E911 Interim Surcharge Order at 17, 18. Accordingly, in this proceeding, we reconcile the estimated data from the time period in which the \$0.85 surcharge was in effect with the actual data available for that time period in order to arrive at a revised surcharge on a going-forward basis.

¹⁹ The statutory authority to impose an E911 surcharge expires on December 31, 2007. See G.L. c. 6A, § 18H½. The Department is currently preparing a recommendation to the Legislature on a long term plan for funding E911 services in Investigation by the Department of Telecommunications and Energy on its own motion to develop a long term plan for funding Enhanced 911 services, D.T.E. 06-33.

fund balance for the fiscal year (RR-DTE-2; RR-DTE-2 Supp., Revised Scenario 2; SETB Brief at 6-7).

(1) Access Line Count Data

SETB states that, based upon actual line count data provided by carriers from FY 2004 through FY 2006, the actual monthly line count has declined at a rate of approximately 2.8 percent, and SETB argues it has reasonably estimated that the 2.8 percent decline rate would continue for FY 2007 and partial FY 2008 (RR-DTE-2; SETB Brief at 7; see also Exh. DTE-SETB 1-17). SETB states that the actual monthly average number of customers in FY 2004 through FY 2006 and the projected number of wireline customers for FY 2007 and partial FY 2008 are approximately 25 percent lower than the estimated 5.1 million customers used to calculate the \$0.85 interim surcharge in D.T.E. 03-63 Phase I and that this is the primary reason for the requested increase in the surcharge (RR-DTE-2; RR-DTE-2 Supp.; Exh. SETB-3, at 4; Exh. SETB-4; Exh. DTE-2; Tr. at 102-103; SETB Brief at 7).

(2) Uncollectible Revenue Figure²⁰

SETB states its projected uncollectible revenue figure of two percent is in line with the percentage of uncollectible revenue of 2.4 percent used by Verizon in the interim surcharge proceeding (RR-DTE-5; Exh. DTE-SETB 1-9; Exh. DTE-2; Tr. at 37-38; SETB Brief at 7).

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Department regulation provides that carriers are only obligated to remit the actual E911 surcharge amounts collected from wireline customers to SETB. See 220 C.M.R. § 16.03(8).

(3) Interest

SETB states that Revised Scenario 2 does not include actual interest earned on the E911 Wireline Fund balance for FY 2005 and FY 2006 because these amounts were not credited to the spending account (RR-DTE-2 Supp.). SETB states that it is in contact with the Office of the State Comptroller with regard to this issue (id.). SETB, however, has projected interest for FY 2007 and partial FY 2008 (RR-DTE-2 Supp., Revised Scenario 2; SETB Brief at 7). SETB states that it applied an interest rate of five percent to the projected total fund balance at the end of each month (RR-DTE-2, Scenario 2; SETB Brief at 7). SETB states that the Office of the State Treasurer provided SETB with a interest rate of 5.24 percent for July 2006, and SETB therefore argues that projected interest rate of five percent utilized in Revised Scenario 2 is reasonable (RR-DTE-8; SETB Brief at 7).

b. Expenses

The expenses incurred to provision E911 service and disability access programs, and for deficit recovery are broken down into five categories: 1) SETB Administration and Programs; 2) Major City Chiefs ("MCC") Training Fund²¹; 3) E911 Services; 4) Relay Services and Disability Access Programs; and 5) Deficit Recovery. All expenses except for disability access program and deficit recovery expenses represent 50 percent of the total expenses for these categories; the other 50 percent of the expenses are paid for through the

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The Massachusetts Chiefs of Police Association, which consists of police chiefs from every municipality in the Commonwealth, is represented on SETB. G.L. c. 6A, § 18B(a). The MCC is a separate association made up of major city police chiefs (Tr. at 90). In this Order, we refer the MCC Training Fund also as the PSAP Training Fund.

*Wireless E911 Fund*²² (Exh. SETB-3, at 6; Exh. DTE-SETB 1-7; Exh. DTE-SETB 1-8; Tr. at 44-46; SETB Brief at 4). Each expense category is discussed below.

(1) SETB Administration and Programs

Administration expenses include the salaries and overhead for 19 employees, of which ten are contract employees (six current contract employees and four additional contract employees to be hired for FY 2007 to complete the PSAP equipment upgrade) (Exh. DTE-SETB 1-4; Exh. SETB-1, at 2). Office supplies and equipment, vehicle leases, utility costs, and expenses for maintaining four regional training sites are also included in administration expenses (Exh. DTE-SETB 1-4(c); Exh. SETB-1, at 3). SETB program expenses include training E911 call takers and dispatchers in equipment handling and managing the various type of emergency calls received, disability access testing of equipment and quality assurance, public education and interpretive services (Exh. DTE-SETB 1-4(d), (f); Exh. SETB-1, at 3). The actual expenses incurred for FY 2004 through FY 2006 were \$321,914, \$1,124,573 and \$1,200,683, respectively (RR-DTE-2 Supp., Revised Scenario 2). The projected SETB administration and program expenses for FY 2007 and partial FY 2008 are \$2,841,192 and \$1,090,370, respectively (id.)

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Given the integration of the network, database and equipment components in handling wireline and wireless 911 calls, SETB began allocating E911 expenses between the Wireline and Wireless E911 Funds in FY 2005 on a 50/50 basis (Exh. SETB-3, at 6; Exh. DTE-SETB 1-6; Exh. DTE-SETB 1-7; Exh. DTE-SETB 1-8; SETB Brief at 4-5; Tr. at 40-44). Based upon statutory mandates, expenses related to the disability access programs and deficit recovery, however, are charged to the Wireline E911 Fund only. (C.L.C. 6A, § 1811 (see also Exh. SETB-3, at 5; Exh. DTE-SETB 1-6; RR-DTE-13; SETB Brief at 5))

SETB argues that the projected expenses for FY 2007 and partial FY 2008 are necessary for coordinating and effecting the E911 system and administering relay services and disability access programs in the Commonwealth (SETB Brief at 8). SETB notes that the projected expenses for FY 2007 and partial FY 2008 reflect the additional personnel and resources needed to complete the equipment upgrade in a compressed timeframe,²³ and are reasonable (id., citing RR-DTE-2; Exh. DTE-SETB 1-4; Exh. DTE-SETB 1-4(a), Att.; Exh. DTE-SETB 1-4(c), Revised Att.; RR-DTE-4; Exh. DTE-SETB 1-11(g)).

(2) MCC Training Fund

On June 7, 2006, SETB voted to create a MCC Training Fund for the period from July 1, 2006 through December 31, 2007 (Exh. SETB-2; Exh. SETB-3, at 3-4; Tr. at 90). The projected cost of the training fund for FY 2007 and six months of FY 2008 is derived by multiplying the previous fiscal year's net revenue by five percent (RR-DTE-2; SETB Brief at 9). Based upon the proposed \$0.99 surcharge, the projected cost of the training fund in FY 2007 and the first six months of FY 2008 are \$1,830,652 and \$929,032, respectively (RR-DTE-2, Supp., Revised Scenario 2).

Under the proposed MCC Training Fund, five percent of the wireline revenue would be made available directly to PSAPs across the Commonwealth to reimburse training costs borne by the municipalities who train their E911 call-takers and dispatchers to standards set by

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Revised Scenario 2 of RR-DTE-2 Supp. anticipates completion of the equipment upgrade in 18 months as opposed to the 30-33 month projected completion date anticipated when the project was proposed in D.T.E. 03-68 - Phase I (see Exh. DTE-SETB 1-13(g)).

SETB (Exh. SETB-4, at 1; SETB Brief at 9, citing Exh. SETB-3, at 4; Tr. at 92-97). SETB states that the guidelines and criteria for PSAP eligibility to receive funds from the MCC Training Fund are currently being written by SETB staff (id., citing Tr. at 95-97). SETB states that the focus of these guidelines and criteria will be to effectively administer the MCC Training Fund to ensure that funds are used to train E911 call takers and dispatchers to meet public safety obligations and would not be a subsidy to PSAPs or municipalities for personnel costs unrelated to E911 training (id., citing Tr. at 32-33, 92, 94-97). SETB indicates that the funds could be used for trainee's salaries while at training, travel expenses to training courses, and backfill costs while an E911 call taker or dispatcher is at training (SETB Reply Brief at 1, citing Tr. at 32-33, 92, 94-97). SETB asserts that the funds would relieve the financial strain and resource drain experienced by PSAPs in sending their E911 call takers and dispatchers to training, and will provide greater training opportunities to PSAP personnel (SETB Reply Brief at 1-2, citing Tr. at 94-95).

SETB argues that five percent of the wireline revenue is a reasonable amount to accomplish the purposes of the training fund proposal (SETB Reply Brief at 2). Considering that approximately 270 PSAPs could be eligible to receive funds under the training proposal, SETB argues that its proposed training fund is an amount that is conservative yet will assist the PSAPs in their E911 training efforts (id.).

(3) E911 Services(a) Recurring Costs

The recurring costs for E911 provisioning are based upon the Wireless and Wireline E911 contract with Verizon to provide E911 services through 2007 (Exh. SETB-1, at 3). The actual recurring costs incurred for FY 2004 through FY 2006 were \$11,255,457, \$16,559,746 and \$6,248,692, respectively (RR-DTE-2 Supp., Revised Scenario 2). The projected recurring costs for FY 2007 and partial FY 2008 are \$6,994,349 and \$4,059,886, respectively (id.).

The recurring costs cover updating and maintaining the data center which consists of the Automatic Number Identification ("ANI") and Automatic Location Identification ("ALI") databases,²⁴ providing the 911 network facilities including dedicated trunk lines and selective routers, network maintenance and running the Customer Care Center,²⁵ developing the mapping data that will be used by PSAPs in both the wireline and wireless environments once the PSAPs are outfitted with the mapping equipment, and installing "demilitarized zone"

The ANI and ALI databases contain customer information, such as name, address, and telephone number, and are used to determine to which PSAP to route a 911 call. The PSAP uses the 911 caller's ANI to retrieve the 911 caller's location information from the ALI database in order to provide the appropriate emergency service dispatch to the 911 caller's address. See <http://www22.verizon.com/wholesale/glossary>.

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Network maintenance services and the Customer Care Center, which serves as the first point of customer service for a dispatcher or PSAP administrator faced with a service-related question or problem, provide for 24/7 monitoring and maintenance for all components of the E911 system, and includes remote monitoring, a customer service call response center, and dispatch repair service to any PSAP within two to four hours (Exh. DTE-SETB 1-11(a)).

("DMZ") technology²⁶ (*id.*; Exh. DTE-SETB 1-11; Tr. at 8, 54-55; SETB Brief at 9).

Regarding the costs of developing the mapping data, SETB states that the actual and projected expenses are derived from an interdepartmental service agreement between SETB and Massachusetts Geographic Information System ("MassGIS"), an agency within the Executive Office of Environmental Affairs, to provide updated, synchronized mapping data and information to SETB for use by PSAPs (SETB Brief at 10-11, *citing* Tr. at 41-42). SETB expects to install the DMZ technology in about 50 PSAPs in FY 2007 and partial FY 2008 and maintains that the costs for this technology is reasonable (*id.*, *citing* Tr. at 53-54).

(b) Non-recurring expenses

The non-recurring E911 costs include the total projected costs of the capital equipment upgrade to provide new customer premises equipment ("CPE")²⁷ to all PSAPs in the Commonwealth, the costs of optional headsets for PSAPs and the costs for PSAP equipment moves (Exh. SETB-1, at 3; Exh. DTE-SETB 1-14). The actual non-recurring costs incurred for FY 2005 through FY 2006 were \$0, \$0 and \$2,108, respectively (RR-DTE-2 Supp., Revised Scenario 2). SETB expects the equipment upgrade will be completed by December 2007 and, thus, SETB has projected the costs for the upgrade for FY 2007 and partial FY 2008 (SETB Brief at 11). The total projected non-recurring costs for FY 2007 and partial FY

²⁶ SETB explains that DMZ is a term used to describe a system located between a trusted internal network and an untrusted external network, and that the DMZ technology is a firewall to protect the two networks and the integrity of the E911 system (SETB Brief at 11, *citing* Tr. at 8-9, 54).

²⁷ CPE includes the E911 computer equipment provided by SETB to municipalities and installed in the PSAPs.

2008 are \$25,655,321 and \$15,698,261, respectively (RR-DTE-2 Supp., Revised Scenario 2).

The majority of the total projected non-recurring cost is due to the projected costs for the equipment upgrade which are \$25,655,321 for FY 2007 and \$14,933,235 for partial FY 2008 (id.).²⁸

SETB states that the projected costs of the equipment upgrade are derived from the E911 Wireline Contract with Verizon which was entered into in 2004 following Request for Responses ("RFR") EPS 05-001 (SETB Brief at 11). SETB maintains that the projected costs of the equipment upgrade are based on a contract that was vetted through a valid and legal RFR process that met all state requirements (id. at 13, citing Exh. DTE-SETB 1-13(d)). SETB states that the procurement management team ("PMT") for the RFR developed criteria to evaluate bid proposals based on state procurement requirements and that the RFR required the bidder to provide full replacement of the CPE at all the primary PSAPs in the Commonwealth (id. at 12, citing RR-DTE-12; Exh. DTE-SETB 1-2; Exh. DTE-SETB 1-14(c), Att.). The equipment upgrade, SETB explains, is to replace equipment installed in PSAPs in the 1993-1996 time frame and includes special telephone equipment capable of interfacing with the 911 voice and data lines, seamlessly retrieving the ALI data, and presenting the information to the

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G.L. c. 6A, § 18D(c)(4) requires Department approval of all SETB-recommended expenditures affecting the provision of E911 service that result in an aggregate total of \$500,000 or more in a calendar year. In the instant case, the proposed capital expenditures for FY 2007 and partial FY 2008 exceed \$500,000. We find that a separate request for approval of the proposed capital expenditures would be duplicative and is therefore unnecessary. Instead, we determine that SETB's \$0.99 surcharge proposal incorporates a request pursuant to G.L. c. 6A, § 18D(c)(4) for approval of the capital expenditures contained therein.

call-taker answering the call (id., citing Exh. DTE-SETB 1-14(c), Att.; Exh. DTE-SETB 1-13(a)). In addition, SETB states that the CPE provided by the program was to provide instant recall and archive recording capability, call transfer features and TTY functionality at each call-taker position, and, with the advent of wireless 911, SETB states that additional CPE features were required to provide PSAPs with a graphical mapping display of the caller's location delivered as latitude and longitude coordinates (id.). SETB states that Verizon, the only bidder to the RFR, met the requirements of the RFR and was awarded the contract (id.). SETB asserts that Verizon's bid to the RFR, which included the equipment upgrade, was determined by SETB to be reasonable (id.). SETB notes that the equipment upgrade expense is the same equipment upgrade expense which was included in SETB's and Verizon's proposals for the \$0.85 interim surcharge in DTE 03-63-Phase I except that the current cost projection is \$25 million less than the estimate presented to the Department in that earlier case due to the current 50/50 allocation with the Wireless E911 Fund (id. at 13).

With respect to costs of PSAP moves and headsets, SETB states that, with the equipment upgrade, it expects there will be a number of PSAP moves as well as requests for headsets, and that the cost projections for PSAP moves and headsets are reasonable estimates (SETB Brief at 13, citing Tr. at 27-28 and RR-DTE-2, Scenario 2). Additionally, SETB states that new headsets are requested because of sanitary reasons (id., citing Tr. at 28).

(4) Relay Services and Disability Access Programs

The costs of funding the relay center and disability access programs are based upon SETB's contract with Verizon to provide these services through June 30, 2007, and, according to SETB, the cost projections are based upon Verizon estimates (SETB Brief at 14; Exh. SETB-1, at 3; Exh. DTE-SETB 1-14(a), (b)). The actual expenses incurred in FY 2004 through FY 2006 were \$10,441,828, \$9,862,737 and \$6,329,675, respectively (RR-DTE-2 Supp., Revised Scenario 2). The projected expenses for FY 2007 and partial FY 2008 are \$7,462,420 and \$3,910,188 (id.). SETB states that Verizon has been the sole administrator of relay services and disability access programs since 1991 (SETB Brief at 14, citing Exh. DTE-SETB 1-14(a)).

(5) Deficit Recovery

The reserve for deficit recovery is based upon a Settlement Agreement between SETB and Verizon which provides for a monthly payment to pay off the balance of the deficit, resulting from the directory assistance funding method, that is not recovered through directory assistance revenues collected through 2007 (Exh. SETB-1, at 3; Exh. DTE-SETB 1-14(d)). Pursuant to the Settlement Agreement, SETB's monthly payment to Verizon was \$303,500 from January 1, 2003 through June 30, 2004, and \$607,000 per month thereafter until the deficit is eliminated (Exh. DTE-SETB 1-14(d), ¶ 3). As of March 2006, the deficit was \$10,664,035 (Exh. DTE-VZ 1-1). Verizon projects the deficit to be paid off in the first quarter of 2007 (see Exh. DTE-VZ 1-6). SETB states that the exact date when the deficit will

be paid off must be determined by the Department in consultation with Verizon based upon directory assistance revenues (Exh. SETB-1, at 3).

SETB states that consistent with the Settlement Agreement, the projected deficit figures for FY 2007 and partial FY 2008 contained in Revised Scenario 2 reflect Verizon's calculation of the deficit in this proceeding (SETB Brief at 15, citing Exh. DTE-VZ 1-1). SETB explains that in FY 2006, actual expenditures for deficit recovery and the disability access programs represented approximately 64 percent of the total expenses being paid from the Wireline E911 Fund (SETB Brief at 5, citing RR-DTE-2, Scenario 2; Tr. at 52; see also RR-DTE-2 Supp., Revised Scenario 2). This percentage falls to approximately 24 percent for projected FY 2007 due to the equipment upgrade, but, SETB notes, deficit recovery and disability access program expenses still represent a significant portion of what is paid from the Wireline E911 Fund (id.).

2. Verizon

Verizon states that surcharges should be set at the lowest rate that adequately covers the expenses prudently incurred by SETB in providing its services, in order to ensure that wireline telephone consumers are not burdened with additional taxes on their telephone service (Verizon Brief at 2). Verizon submits that the MCC Training Fund is supplemental to the operational training and should not be considered a prudently incurred expense to be paid by telephone customers in the Commonwealth (id.).

D. Analysis and Findings

1. Revenues

As indicated above, E911 revenue is calculated based upon the beginning fund balance, net revenue derived by multiplying the surcharge by the line count, and subtracting a one percent administrative fee²⁹ and a two percent uncollectible revenue amount, and adding actual or estimated interest earned (see RR-DTE-2; RR-DTE-2 Supp.; SETB Brief at 6-7). For the following reasons, we determine that SETB's projections of line count, the interest rate, and the uncollectible revenue percentage used to determine E911 revenues are reasonable. First, SETB utilized the actual average monthly line count data from three consecutive fiscal years, FY 2004 to FY 2006, to calculate the decline rate of 2.8 percent and projected the 2.8 percent decline rate into FY 2007 and partial FY 2008 (RR-DTE-2 Supp., Revised Scenario 2). We conclude that with the continuing migration of wireline customers to wireless, as well as to emerging technologies such as Voice Over Internet-Protocol ("VoIP"), a projected decline in wireline customers in FY 2007 and partial FY 2008 is reasonable. Indeed, according to the National Emergency Number Association ("NENA") report issued in March 2006, more than nine percent of U.S. wireless customers currently use wireless handsets as their primary phone, and this figure is projected to increase to at least 23 percent by 2009. See Next Generation 9-1-1: Responding to an Urgent Need for Change at 1 (March 2006).³⁰

²⁹ The one percent administrative fee is established by Department regulations. See 220 C.M.R. § 16.04(1).

³⁰ The NENA report is available at: www.nena.org/media/files/ng_final_copy_lo-rez.pdf.

Additionally, the NENA report indicates that the three million U.S. residential VoIP customers which exist today will exceed 27 million by 2009. Id. We therefore conclude that the projected 2.8 percent rate, which is based upon the three most recent consecutive years of actual data, is a reasonable projection of the decline in the number of wireline customers over the next 18 months.

Turning to the uncollectible revenue rate, SETB states that approximately ten percent of carriers provided SETB with uncollectible revenue information and that these carriers reported an uncollectible revenue rate between two percent and 8.5 percent (RR-DTE-5; Exh. DTE-SETB 1-9). SETB has proposed a uncollectible revenue rate on the low end of the scale and we agree with SETB that its proposed two percent uncollectible revenue rate is a reasonable estimate. Moreover, because the two percent rate is consistent with Verizon's uncollectible revenue rate of 2.1 percent across residential and business lines³¹ (see RR-DTE-17), as well as the uncollectible revenue rate of 2.4 percent approved in D.T.E. 03-63 - Phase I (see Exh. DTE-2; see also E911 Interim Surcharge Order at 16), we find it reasonable.

Similarly, we find SETB's projected five percent interest rate for FY 2007 and partial FY 2008 to be a reasonable estimate of the interest rate to be applied to the E911 Wireline Fund balance for FY 2007 and partial FY 2008. As SETB noted, the interest rate fluctuates monthly and, therefore, we find that making a conservative estimate based on the July 2006 interest rate of 5.24 percent provided by Massachusetts Office of the State Treasurer (see RR-

³¹ Verizon does not track E911 uncollectible revenues separately from other uncollectible revenues; therefore Verizon's 2.1 percent uncollectible rate represents an aggregated uncollectible revenue rate (see Exh. DTE-VZ 1-5).

DTE-8) is reasonable. We therefore conclude that the five percent interest rate utilized in the projected revenue calculations for FY 2007 and partial FY 2008 is reasonable.

We now turn to actual interest earned in FY 2005 and FY 2006. In its calculations of the proposed \$0.99 surcharge rate, SETB has removed actual interest earned in FY 2005 and FY 2006 and explains that, while the interest was earned, it has not been credited to SETB's spending account (RR-DTE-2 Supp.). While SETB indicates that it is in contact with the Office of the State Comptroller with regard to this issue, it is necessary to address this issue further.

The actual interest earned in FY 2005 and in FY 2006 was \$423,179 and \$845,325, respectively (see RR-DTE-2, Scenario 2). Assuming, arguendo, the earned interest is credited to SETB's spending accounts in calendar year 2007, we are reluctant to require a recalculation of the surcharge level because multiple customer notifications of changes would likely lead to customer confusion. By not requiring a recalculation of the surcharge level if the earned interest is credited to SETB's spending accounts in calendar year 2007, we acknowledge that the reserve on December 31, 2007 will increase by nearly \$1.3 million to approximately \$3.4 million. Given the possible delays in enacting and implementing new E911 legislation for effect on January 1, 2008, as well as to cover any contingencies that may arise in the provision of E911 service in FY 2007 and partial FY 2008, we determine that a \$3.4 million reserve, which is roughly nine percent of the net revenue for the time period the \$0.99 surcharge is in effect, is reasonable. We direct SETB to report to the Department when this matter is resolved with the Office of the State Comptroller, and to provide details as to the interest amounts.

2. Expenses

a. SETB Administration and Programs

Actual expenses incurred for FY 2005 and FY 2006 were approximately \$1.1 and \$1.2 million, respectively³² (RR-DTE-2 Supp., Revised Scenario 2). For FY 2007 and partial FY 2008, SETB expects its Administration and Programs expenses to increase significantly because of the additional personnel and resources needed to complete the equipment upgrade in a compressed time frame (SETB Brief at 8). Specifically, for FY 2007 and partial FY 2008, SETB projects expenses of approximately \$2.8 million and \$1.1 million, respectively (*id.*). Salaries constitute the largest expense in SETB Administration and Programs cost categories and are projected to be \$1.1 million and \$459,452 for FY 2007 and partial FY 2008 (Exh. DTE-SETB 1-4(a), Att.). The salary expense includes fringe benefits and other indirect costs such as unemployment and medicare as well as an assessment by the Executive Office of Public Safety ("EOPS")³³ for fiscal and human resource services provided by EOPS (*id.*). There are 13 state employee positions which support the ongoing operations of the E911

³² In FY 2004, a majority of the expenses for SETB Administration and Programs were charged to the Wireless E911 Fund due to a statutory oversight that failed to vest authority in SETB to expend wireline surcharge revenues that it had been collecting since September 2003 (see Exh. DTE-SETB 1-5). This oversight was corrected in June 2004. See Acts of 2004, c. 149, § 19. Therefore, in FY 2004, actual expenses charged to the Wireline E911 Fund for SETB Administration and Programs was only \$321,914 (RR-DTE-2 Supp., Revised Scenario 2).

³³ SETB is a sub-agency under EOPS. See G.L. c. 6A, § 18B(a).